

Name: \_\_\_\_\_

**Mathematics in Business****Directions:**

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

**Rating Scale:**

- 3 Mastered** – can work independently with no supervision  
**2 Requires Supervision** – can perform job completely with limited supervision  
**1 Not Mastered** – requires instruction and close supervision  
**N No Exposure** – no experience or knowledge in this area

**NOTE:** Students should have an understanding of basic math competencies, such as adding, subtracting, multiplying, dividing, reading, writing, and pronouncing whole numbers, fractions, decimals, and percents. They should be able to perform common conversions with mixed numbers (e.g., convert fractions to decimals, convert percents to fractions) and to compute averages. Computer skills are also helpful when using this profile. Duty bands and competencies do not need to be taught in any particular order. Some duty bands and competencies can be integrated and taught together. Team teaching is encouraged. Competencies completed will depend on the length of the course. The code in parentheses is the competency identification number used in computerized management systems.

3	2	1	N	<b>A. Math Applications</b>	<b>Notes:</b>
				1. Compare career opportunities that use mathematical concepts in everyday work (A001)	
				2. Proofread numerical data (A002)	
				3. Develop and apply math shortcuts to solve business problems (A003)	
				4. Compare an estimated answer to a computed solution (A004)	
				5. Apply problem-solving processes to real-world situations (A005)	
				6. Communicate mathematical solutions (oral and written) (A006)	
				7. Utilize team skills to analyze and solve business math problems (A007)	
				Others (specify):	

3	2	1	N	<b>B. Workplace Technology</b>	<b>Notes:</b>
				1. Define math terms related to the workplace (e.g., gross pay, net pay, FICA, commission) (B001)	
				2. Complete employee payroll forms (e.g., W-4, W-2, insurance) (B002)	
				3. Operate a calculator by the touch method (B003)	
				4. Determine and count back change to customers (B004)	
				5. Express a numerical relationship as a ratio (B005)	
				6. Calculate markups and markdowns based on cost and selling prices (B006)	
				7. Calculate trade and cash discounts (B007)	

				8. Complete business forms related to sales and purchasing (e.g., requisition, purchase order, invoice) (B008)	
				9. Compute inventory values using LIFO, FIFO, average cost (B009)	
				10. Compare/contrast inventory values (e.g., LIFO, FIFO, average cost) (B010)	
				11. Compute depreciation expense (e.g., using I.R.S. tables and software) (B011)	
				12. Compare/contrast depreciation methods (e.g., straight line, weighted average, double declining balance) (B012)	
				13. Identify the order of mathematical operations as it relates to computer spreadsheet applications (B013)	
				14. Analyze business data using statistical functions (e.g., @, avg, sum, max, if) (B014)	
				15. Construct and interpret computer-generated business graphs and/or charts (B015)	
				16. Assess the cost-effectiveness of telecommunication services (e.g., car phone, FAX, e-mail, bulletin board) (B016)	

Others (specify):


3	2	1	N	C. Personal Money Management	Notes:
				1. Compute gross and net earnings for salaried employees (C001)	
				2. Compute gross and net earnings for hourly employees (C002)	
				3. Compute gross and net earnings for commissioned employees (C003)	
				4. Compute gross and net earnings for piecework employees (C004)	
				5. Calculate the value of non-compensation employee benefits (e.g., vacation, health insurance) (C005)	
				6. Prepare personal budgets (C006)	
				7. Record checking accounting transactions and maintain accurate balances (C007)	
				8. Compute simple interest (C008)	
				9. Compute compound interest (C009)	
				10. Evaluate characteristics, costs, and benefits of investments (e.g., savings account, IRA, CD, annuity) (C010)	
				11. Analyze amortization schedules for short- and long-term loans (C011)	
				12. Compare interest and other charges (e.g., annual fees, late fees) on credit cards (C012)	
				13. Compare insurance rates and services (C013)	
				14. Compute property taxes (C014)	

				15. Complete personal federal income tax forms (C015)	
				16. Complete personal state income tax forms (C016)	

Others (specify):


3	2	1	N	D. Entrepreneurial Math	Notes:
				1. Develop a business plan (D001)	
				2. Investigate types and costs of business loans (D002)	
				3. Determine the cost of employee benefits and employer taxes (e.g., health insurance, FICA, disability, unemployment) (D003)	
				4. Complete business tax forms (e.g., income, sales, payroll) (D004)	
				5. Prepare and interpret financial statements (D005)	
				6. Compute working capital and return on assets (D006)	
				7. Apply probability measures to determine chances of business success (D007)	
				8. Describe consequences of business closure and/or restructuring (e.g., liquidation, downsizing, bankruptcy) (D008)	

Others (specify):


3	2	1	N	E. International Math	Notes:
				1. Apply currency exchange rates (E001)	
				2. Compare/contrast the cost of living and standard of living in the United States with other countries (E002)	
				3. Measure weight in standard (English) and metric units (E003)	
				4. Measure distance in standard (English) and metric units (E004)	
				5. Measure volume in standard (English) and metric units (E005)	

Other (specify):
